Arid Soil Research and Rehabilitation

Volume 4, Number 1 1990

Contents

The Role of Algae and Cyanobacteria in Arid Lands, A Review
Augustine O. Isichei 1

Composition of Fungal Groups Associated with Sewage Sludge Amended Grassland Soils
P. R. Fresquez and G. L. Dennis 19

Principles of Zone Identification and of Interventions to Stabilize Sands in Arid Mediterranean Regions
C. Floret, E. Le Floc'h, and R. Pontanier 33

Quality and Yield of Soybean Seeds as Affected by Inoculation, NPK Fertilization, and Soil Salinity
Taha Mahmoud El-Essawi and Dawlat Abadi 43

Research Note

Water Retention and Nutrient Availability in a Fly Ash Amended Desert Sandy Soil: A Study *in vitro*
B. M. Sharma, R. K. Aggarwal, and Praveen-Kumar 53

Nexus

Editorially Speaking 59

Social Considerations in Rural Development: Opportunity and Response Amongst Small Farmers in Eastern Oman
Tom Gabriel 61

Social Analysis and Rural Development Strategies for Oman
Tom Gabriel 75

Abstracted and/or indexed in: Cambridge Scientific Abstracts; Current Awareness in the Biological Sciences; Environmental Periodicals Bibliography; Geographical Abstracts; Health and Safety Science Abstracts; International Development Abstracts; Irrigation and Drainage Abstracts; Pollution Abstracts; Referativnyi Zhurnal; Soils and Fertilizers Abstracts.

Taylor & Francis

New York • Bristol, PA • Washington, DC • London

Arid Soil Research and Rehabilitation

Volume 4, Number 2 1990

Contents

Research Review

The Role of Microorganisms in Aggregate Formation and Soil Stabilization: Types of Aggregation
Susan M. Forster 85

Effects of Mycorrhizae on Sorghum Growth, Photosynthesis, and Stomatal Conductance under Drought Conditions
M. A. Ibrahim, W. F. Campbell, L. A. Rupp, and E. B. Allen 99

Boro Hidrosoluble en Suelos del Centro-Oeste Semiárido de España y su Relación con los Parámetros Edáficos
A. Moyano, A. Prieto, J. F. Gallardo, and I. Santa Regina 109

Water Effect on *Rebudia pinata* Decomposition and Microarthropod Population in Negev Desert
Y. Steinberger and N. Ben-Ythak 117

Enhancement of Endomycorrhizal Activity through Nitrogen Fertilization in Cowpea Grown in an Oxisol Subjected to Simulated Erosion
Taufiqul Aziz and Mitiku Habte 131

Reclamation of Saline Sediments Deposited During a Flash Flood on Agricultural Lands in the Indian Arid Zone
D. C. Joshi and R. P. Dhir 141

Abstracted and/or indexed in: Cambridge Scientific Abstracts; Current Awareness in the Biological Sciences; Environmental Periodicals Bibliography; Geographical Abstracts; Health and Safety Science Abstracts; International Development Abstracts; Irrigation and Drainage Abstracts; Pollution Abstracts; Referativnyi Zhurnal; Soils and Fertilizers Abstracts.

Taylor & Francis

New York • Bristol, PA • Washington, DC • London

Arid Soil Research and Rehabilitation

Volume 4, Number 3
1990

Contents

Correlation of Lignin with Dissemination Strategy among Annual Desert Plants
Y. Steinberger, A. Shmida, and H. Leschner 149

Impact of Machinery Compaction and Tillage Systems on Infiltration Rate of Sandy Soils
Ahmed Abo-Abda and Ghulam Hussain 157

Response of a Shrub–Steppe Ecosystem to Fire: Soil Water and Vegetational Change
Steven O. Link, Glendon W. Gee, Michael E. Thiede, and Peter A. Beedlow 163

Crop Yields and Properties of a Sodic Soil as Influenced by S-Containing Amendments under Draining and Nondraining Conditions
K.P. Patel, Bhajan Singh, and I.M. Chhibba 173

Spatial Variability of $CaCO_3$ Solubility in a Chihuahuan Desert Soil
G.M. Marion, W.H. Schlesinger, and P.J. Fonteyn 181

Effect of Intercropping and Organic Soil Amendments on Native VA Mycorrhizal Fungi in an Oxisol
K.M. Harinikumar, D.J. Bagyaraj, and B.C. Mallesha 193

Research Note

Influence of Soil Solarization on the Viability of *Fusarium solani* in an Arid Environment
Satish Lodha and Anjali Vaidya 199

Errata 203

Abstracted and/or indexed in: Cambridge Scientific Abstracts; Current Awareness in the Biological Sciences; Environmental Periodicals Bibliography; Geographical Abstracts; Health and Safety Science Abstracts; International Development Abstracts; Irrigation and Drainage Abstracts; Pollution Abstracts; Referativnyi Zhurnal; Soils and Fertilizers Abstracts.

Taylor & Francis
New York • Bristol, PA • Washington, DC • London

Arid Soil Research and Rehabilitation

Volume 4, Number 4
1990

Contents

Calibration and Sensitivity Testing of CREAMS and ERHYM-II Computer Models for Use in a Cold Desert Environment
John W. Laundre´ 205

Characteristics and Classification of Arid Zone Soils of Punjab, India
P. S. Sidhu and B. D. Sharma 223

Soil Response to Cattle Trampling and Mechanical Seedbed Preparation
Bruce A. Roundy, Roy N. Keys, and Von K. Winkel 233

Nitrification and Urea Hydrolysis in Amended Calcareous Saline Soils
R. K. Al-Rashidi and M. M. Al-Jabri 243

Ecology and Some Desert Plant Communities of the Eastern Province of Saudi Arabia
Nasser Al-Homaid, Maqbool H. Khan, and Muhammad Sadiq 253

Response of *Acacia nilotica* and *Calliandra calothyrsus* to Different VA Mycorrhizal Fungi
J. Reena and D. J. Bagyaraj 261

Research Note

Effect of Salt Tolerancy Levels on Farming of Date Palm Varieties: A Case Study
Walid A. Abderrahman and Yousef M. Abdelhadi 269

Abstracted and/or indexed in: Cambridge Scientific Abstracts; Current Awareness in the Biological Sciences; Environmental Periodicals Bibliography; Geographical Abstracts; Health and Safety Science Abstracts; International Development Abstracts; Irrigation and Drainage Abstracts; Pollution Abstracts; Referativnyi Zhurnal; Soils and Fertilizers Abstracts.

Taylor & Francis
New York • Bristol, PA • Washington, DC • London